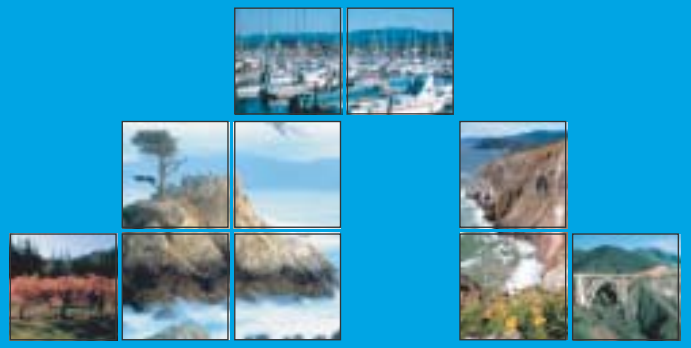


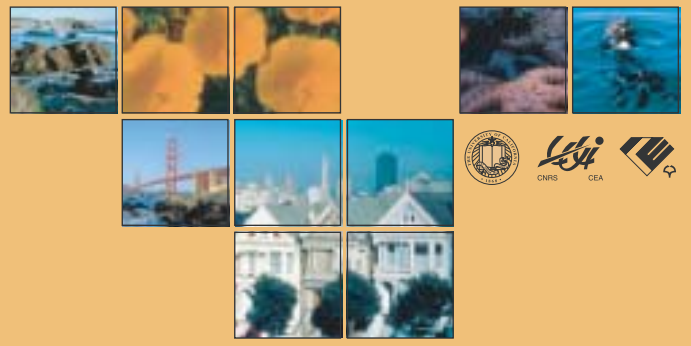
POCKET GUIDE

2003 Third International Conference on Inertial Fusion Sciences and Applications

September 7 – 12 MONTEREY, CALIFORNIA

Organized by:

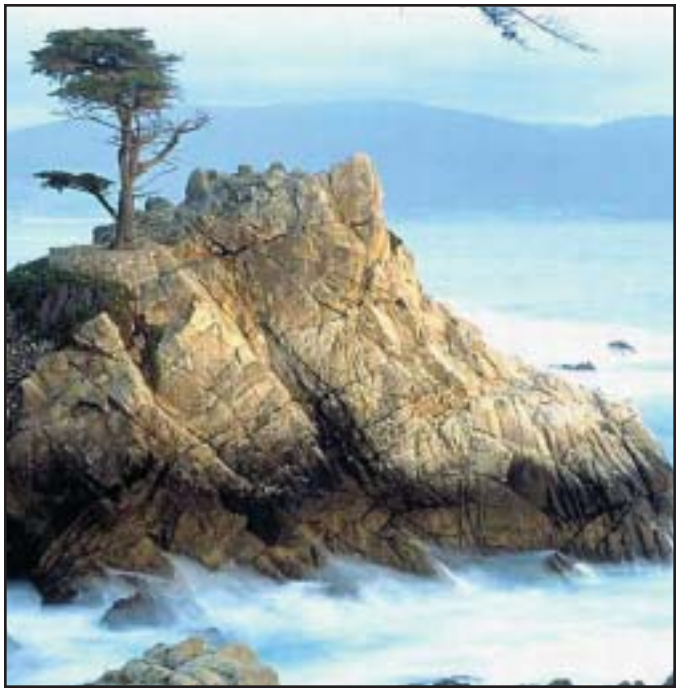
www.llnl.gov/nif/ifsa03



– NOTES –

Welcome to the

2003 Third International Conference on Inertial Fusion Sciences and Applications



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IFSA2003

On behalf of the IFSA Co-Chairs and myself, I welcome you to the Third International Conference on Inertial Fusion Sciences and Applications! The University of California is the host for IFSA2003, and the seven organizations listed on the back cover are responsible for its organization. All have spent considerable effort and resources to make IFSA2003 a success for you. The international organizers would like to acknowledge and thank them. The back pages list our many financial sponsors and exhibitors. I hope you all stop by their booths and thank them for their support. Their aid allows us to keep the registration fees at a reasonable level.

When the IFSA conferences were first organized, we had a simple vision — to provide an opportunity for all researchers, scientists, and engineers alike to gather and exchange information on high-energy density science and inertial fusion energy and other applications. This cross-fertilization of results and ideas can and does stimulate even faster progress in the field. The conference has worked because the organizers enable and then get out of the way!

It will be an intense technical week, but we hope you will also take time to enjoy the social interactions that we offer. We present some typical Californian diversions in the reception area in the Hacienda Courtyard of the Pacific House Museum and at the Banquet on the Beach with bonfires and a live band. Don't miss them!

Finally, I want to congratulate the winners of the 2003 Teller Medal Awards: Prof. Hideaki Takabe of ILE and Dr. Laurance J. Suter of LLNL. Their awards will be presented at the Banquet Wednesday evening.

Enjoy!

William J. Hogan
Organizing Chair, IFSA2003

IFSA Co-chairs

Name	Affiliation
E. Michael Campbell, Co-Chair	General Atomics, USA
Arnold Migus, Co-Chair	Laboratoire pour l'Utilisation des Lasers Intenses (LULI), FRANCE
Kunioki Mima, Co-Chair	Institute of Laser Engineering (ILE), Osaka University, JAPAN
Erik Storm, Co-Chair	Lawrence Livermore National Laboratory (LLNL), University of California, USA
William J. Hogan, Organizing Chair	LLNL, University of California, USA

At a Glance

SUNDAY — September 7		
Time	**Event**	**Location**
6 PM - 9 PM	Registration Open	Exhibit Foyer
6 PM - 9 PM	Starting today! Foreign Nationals are badged by LLNL security representatives for the technical tours.	Exhibit Foyer

MONDAY — September 8		
Time	**Event**	**Location**
7 AM - 6 PM	Registration Open	Exhibit Foyer
9:00 AM	Opening Addresses	DeAnza Ballroom
➲ 9:30 AM	**Keynote Addresses - MK1**	DeAnza Ballroom
11:45 AM	Lunch Break	
➲ 1:30 PM	**Plenary - MP1**	DeAnza Ballroom
3:00 PM	30 min Break	
➲ 3:30 PM	**Parallel Sessions - MO1, MO2, MO3**	DeAnza I, II, III
7:00 PM	Evening Reception	Pacific House Museum — Memory Gardens
➲ See Following Tables For More Details		

➲ Keynote Addresses - MK1		DeAnza Ballroom
Time	**Name**	**Paper # & Title**
9:30 AM	Robert McCrory	MK1.1 Progress in Inertial Confinement Fusion Research in the USA
10:15 AM	Kunioki Mima	MK1.2 Present Status & Future Prospect of IFE Research & High Power Laser Applications in Asia
11:00 AM	Rene Pellat	MK1.3 Inertial Fusion Science in Europe

➲ Plenary – MP1		DeAnza Ballroom
Time	**Name**	**Paper # & Title**
1:30 PM	Steve Haan	MP1.1 Modeling of Indirect Drive Ablative Rayleigh-Taylor Experiments on OMEGA
2:00 PM	Ryosuke Kodama	MP1.2 Fast Heating with a PW Laser as a step to Ignition
2:30 PM	Siegfried Glenzer	MP1.3 Progress in long scalelength laser-plasma interactions

Parallel Session - MO1

Fast Ignition & High Intensity Laser Plasma Interactions - I — DeAnza I

Time	Name	Paper # & Title
3:30 PM	Andrew Mackinnon	MO1.1 Development of proton probing for diagnosing plasmas & shocked materials
3:50 PM	Jean-Claude Gauthier	MO1.2 X-ray emission from subpicosecond laser-generated homogeneous plasmas of various elements
4:10 PM	Pravesh Patel	MO1.3 Isochoric heating with an ultrashort ballistically focused laser- generated proton beam
4:30 PM	Ray Edwards	MO1.4 Experimental Investigation of the Transport of Electron & Proton Beams Generated by the Vulcan Petawatt Laser
4:50 PM	Richard Snavely	MO1.5 Proton Beam Focusing & Heating in Petawatt Laser-Solid Interactions
5:10 PM	P. Rajeev	MO1.6 Enhanced fields & enhanced coupling on nanostructured surfaces

Parallel Session - MO2

Ignition & Implosion Hydrodynamics - I — DeAnza II

Time	Name	Paper # & Title
3:30 PM	Pierre-Andre Holstein	MO2.1 Progress in target physics for LMJ
3:50 PM	Mark Herrmann	MO2.2 Exploration of the Parameter Space for NIF Ignition Capsules
4:10 PM	Y. Saillard	MO2.3 Theory of hot spot formation and thermonuclear burn for ICF targets
4:30 PM	Atsushi Sunahara	MO2.4 Target Design for the Direct-Drive Implosion with High-Z Doped Target
4:50 PM	Pascal Gauthier	MO2.5 Highly resolved simulations of burn propagation in Inertial Confinement Fusion targets
5:10 PM	Debra Callahan	MO2.6 Advances in Targets for Heavy Ion Fusion

Parallel Session - MO3 — Laser and Beam Plasma Interactions - I	DeAnza III	
Time	**Name**	**Paper # & Title**
3:30 PM	Dieter Hoffmann	MO3.1 High Energy Density Physics with Intense Heavy Ion & laser Beams at GSI
3:50 PM	Yongkun Ding	MO3.2 Recent Progress of ICF Experiments & Diagnostics on Shenguang II Laser Facility
4:10 PM	Richard Berger	MO3.3 Damping of & Stimulation Scattering of Light from Ion Acoustic Waves in Collisional Multi-species Plasma
4:30 PM	Bedros Afeyan	MO3.4 Kinetic Electrostatic Electon Nonlinear Waves & Their Interactions Driven by the Ponderomotive Force of Crossing Laser Beams.
4:50 PM	John Moody	MO3.5 Experimental Studies of Simultaneous 351nm & 527nm Laser Beam Interactions in a Long Scalelength Plasma
5:10 PM	William Kruer	MO3.6 Blue & Green Light? Wavelength Scaling for NIF

At a Glance

TUESDAY — September 9		
Time	**Event**	**Location**
7 AM - 6 PM	Registration Open	Exhibit Foyer
8:30 AM	**Plenary - TuP2**	DeAnza Ballroom
10:30 AM	20 min Break	
10:50 AM	**Parallel Sessions - TuO4, TuO5, TuO6**	DeAnza I, II, III
10:50 AM - 12:10 PM	Poster Sessions - TuPo1 Topics: Fast Ignition & High Intensity Laser/Matter Interaction; High Power Laser & Ignition Facilities; Target Fabrication	Portola Room
12:30 PM	Lunch Break	
1:50 PM	**Parallel Sessions - TuO7, TuO8, TuO9**	DeAnza I, II, III
2:00 PM - 4:10 PM	Poster Sessions – TuPo2 Topics: Hot Dense Plasma Atomic Processes; ICF/Plasma Diagnostics; Implosion Hydrodynamics & Hydro-Instabilities; Radiation Hydrodynamics; Target Fabrication	Portola Room
3:30 PM	20 min Break	
3:50 PM	**Parallel Sessions - TuO10, TuO11, TuO12**	DeAnza I, II, III
See Following Tables For More Details		

○ Plenary - TuP2		DeAnza Ballroom
Time	**Name**	**Paper # & Title**
8:30 AM	John Porter	TuP2.1 Performance and Scaling of a Z-Pinch-Driven High-Yield ICF Target Concept
9:00 AM	Michel Koenig	TuP2.2 Recent developments in high pressure physics using laser driven shock waves
9:30 AM	Stanley Skupsky	TuP2.3 Advanced Direct-Drive Target Designs for the NIF
10:00 AM	Grant Logan	TuP2.4 Progress in Heavy Ion Fusion Research

○ Parallel Session – TuO4 Ignition & Implosion Hydrodynamics - II		DeAnza I
Time	**Name**	**Paper # & Title**
10:50 AM	Andrew Schmitt	TuO4.1 Direct Drive Pellet Designs & Performance: High Resolution Simulation & Theory
11:10 AM	L. John Perkins	TuO4.2 High Yield Direct Drive Targets for Inertial Fusion Energy

11:30 AM	Douglas Wilson	TuO4.3 Mixing in Double Shell Capsules
11:50 AM	Peter Amendt	TuO4.4 Hohlraum-driven ignition-like double-shell implosion experiments on Omega: analysis & interpretation
12:10 PM	Warren Garbett	TuO4.5 An Assessment of Mix in OMEGA Double Shell Capsule Implosions

○ Parallel Session - TuO5 Short Pulse Lasers		DeAnza II
Time	**Name**	**Paper # & Title**
10:50 AM	John Collier	TuO5.1 Progress towards PetaWatt level OPCPA
11:10 AM	Catherine Le Blanc	TuO5.2 The Petawatt laser glass chain at LULI : from the diode-pumped front end to the new generation of compact compressors
11:30 AM	Bruno Touzet	TuO5.3 Large diffractive optics: gratings & phase plates produced for LIL laser

11:50 AM	Christopher Barty	TuO5.4 Technical Challenges & Motivations for High Energy Petawatt Lasers on NIF
12:10 PM	Matthias Dreher	TuO5.5 Experimental Demonstration of Superradiant Amplification of Ultra- Short Laser Pulses

Parallel Session – TuO6 DeAnza III
Laboratory Astrophysics

Time	Name	Paper # & Title
10:50 AM	Nigel Woolsey	TuO6.1 Collisionless laboratory experiments with applications to shock physics
11:10 AM	Serge Bouquet	TuO6.2 Simulation & Modeling of Rayleigh-Taylor & Richtmyer-Meshkov Instabilities in Type II Supernovae
11:30 AM	Stephen Libby	TuO6.3 Prospects for Investigating Unusual Nuclear Reaction Environments Using the National Ignition Facility

11:50 AM	Akira Mizuta	TuO6.4 Hydrodynamic Instability of Ionization Fronts in HII Regions
12:10 PM	Dmitri Ryutov	TuO6.5 A perfect hydrodynamic similarity & effect of the Reynolds number on the global scale motion

Parallel Session – TuO7 DeAnza I
Laser and Beam Plasma Interactions - II

Time	Name	Paper # & Title
1:50 PM	Christine Labaune	TuO7.1 Laser-plasma interaction physics with single hot spot & RPP beams in the context of inertial confinement fusion
2:10 PM	Laurent Divol	TuO7.2 A reduced model of kinetic effects related to the saturation of Stimulated Brillouin Scattering in long plasmas
2:30 PM	James Koga	TuO7.3 Effects of Radiation Damping on Charged Particle Motion in the Field of a Strong Electromagnetic Wave

2:50 PM	Marilyn Schneider	TuO7.4 New LPI regime produced in High Temperature Halfraums at the OMEGA Laser
3:10 PM	Denise Hinkel	TuO7.5 Filamentation, deflection, scatter, & crossed beam energy transfer in high temperature hohlraums

Parallel Session – TuO8 DeAnza II
IFE Reactor

Time	Name	Paper # & Title
1:50 PM	Koichi Kasuya	TuO8.1 A Few Important Issues for Future Advanced Designs of Inertial Fusion Reactor Chambers Including Intense Ion Beams & X-rays Associated with Target Implosions
2:10 PM	Mark Tillack	TuO8.2 UV Laser-Induced Damage to Grazing Incidence Metal Mirrors
2:30 PM	Ronald Petzoldt	TuO8.3 Experimental Target Injection & Tracking System Construction & Single Shot Testing

2:50 PM	Manuel Perlado	TuO8.4 Assessment of Structural & Silica Materials under irradiation in Inertial Fusion Reactors: comparison of Multiscale Modeling & Micro/Macroscopic Experiment
3:10 PM	Susana Reyes	TuO8.5 Simulation of X-Ray Irradiation on Optics & Chamber Wall Materials for Inertial Fusion Energy

Parallel Session - TuO9 DeAnza III
Equation of State and Condensed Matter Physics - I

Time	Name	Paper # & Title
1:50 PM	Thomas Boehly	TuO9.1 Deuterium-Equation-of-State Measurements Using Laser-Driven Shocks
2:10 PM	Vladimir Fortov	TuO9.2 Compression of Deuterium at Megabar Pressures By High Explosive-Driven Shock Waves
2:30 PM	Gianluca Gregori	TuO9.3 Electronic structure measurement of solid density plasmas using x-ray scattering

2:50 PM	Andrew Ng	TuO9.4 Single-state measurement of AC conductivity of warm dense gold
3:10 PM	Barukh Yaakobi	TuO9.5 EXAFS Measurements of Shocked Materials

Parallel Session – TuO10
Fast Ignition & High Intensity Laser Plasma Interactions - II DeAnza I

Time	Name	Paper # & Title
3:50 PM	Peter Norreys	TuO10.1 Advanced fast ignition studies at the Rutherford Appleton Laboratory
4:10 PM	Michael Key	TuO10.2 Studies of electron isochoric heating & its applicability to fast ignition. (UCRL-JC-152525-ABS)
4:30 PM	David Hanson	TuO10.3 Study of Z-Pinch-Driven Hemispherical Capsule Implosions for Fast Ignition
4:50 PM	Angelo Caruso	TuO10.4 Ignition of DT fuel contaminated by high-Z material in the Cone-Focused Fast Ignition
5:10 PM	Kazuo Tanaka	TuO10.5 Studies of Hot Electron Characteristics for Fast Ignition

Parallel Session - TuO11 DeAnza II
High Power Laser and Ignition Facilities - II

Time	Name	Paper # & Title
3:50 PM	Vladimir Chernyak	TuO11.1 Strengthened Nd:glass for ICF laser drivers (new possibilities)
4:10 PM	Vladimir Zvorykin	TuO11.2 Durability of KrF laser driver windows in IFE application
4:30 PM	Rahul Prasad	TuO11.3 Enhanced optical damage resistance of 3ω optics using UV & IR lasers
4:50 PM	Vladimir Bredikhin	TuO11.4 KDP, KD*P Crystals for ICF: From Growth of Crystals to Growth of Crystal Elements
5:10 PM	Michael Tobin	TuO11.5 Studies of Scattered Neutron in the NIF Chamber & Implications for Using Material Activation as a Yield Diagnostic

◌ Parallel Session – TuO12 X-Ray Laser & Other Applications		DeAnza III
Time	**Name**	**Paper # & Title**
3:50 PM	Masaharu Nishikino	TuO12.1 Demonstration of a soft x-ray laser with full spatial coherence & diffraction limited divergence
4:10 PM	Stephen Moon	TuO12.2 Temporal, spatial characterization of the evolution of the Ni-like Pd X-ray laser media
4:30 PM	Vyacheslav Shlyaptsev	TuO12.3 Numerical design of x-ray lasers for fusion applications
4:50 PM	James Early	TuO12.4 Alternative Applications of Short Pulse Version of Mercury Fusion Laser Technology
5:10 PM	Katsunobu Nishihara	TuO12.5 Theoretical Modeling of Laser-produced Plasmas for Development of Extreme UV Radiation Source for Lithography

At a Glance

WEDNESDAY — September 10		
Time	**Event**	**Location**
7 AM - 4 PM	Registration Open	Exhibit Foyer
◌ 8:30 AM	**Plenary – WP3**	DeAnza Ballroom
10:30 AM	20 min Break	
◌ 10:50 AM	**Parallel Sessions WO13, WO14, WO15**	DeAnza I, II, III
10:50 AM - 12:10 PM	Poster Sessions – WPo3 Topics: Fast Ignition and High Intensity Laser/Matter Interactions; Heavy Ion Beam Drivers; Laser and Beam Plasma Interactions; Z-pinches and Pulsed Power	Portola Room
12:30 PM	Lunch Break	
◌ 1:50 PM	**Parallel Sessions WO16, WO17, WO18**	DeAnza I, II, III
2:00 PM - 4:10 PM	Poster Session-WPo4 Topics: IFE Reactor; Laboratory Astrophysics; Laser Acceleration; High Power Laser and Ignition Facilities; Short Pulse Lasers; X-ray Lasers	Portola Room
3:30 PM	20 min Break	
◌ 3:50 PM	**Parallel Sessions WO19, WO20, WO21**	DeAnza I, II, III
6:00 PM	Reception	Adventures by the Sea
7:00 PM	Dinner Banquet	Adventures by the Sea
9:00 PM	Edward Teller Award	Adventures by the Sea
◌ See Following Tables For More Details		

Plenary – WP3 DeAnza Ballroom

Time	Name	Paper # & Title
8:30 AM	Thomas Bernat	WP3.1 Target Technologies for X-ray Driven Ignition on the NIF
9:00 AM	T. Craig Sangster	WP3.2 Bridging the Gap: Ignition Diagnostics for the National Ignition Facility
9:30 AM	Olivier Peyrusse	WP3.3 New developments in the field of atomic physics in hot dense plasmas
10:00 AM	Hiroyuki Shiraga	WP3.4 Implosion Hydrodynamics & Hydro-Instabilities

Parallel Session – WO13
Implosion Hydrodynamics & Hydro-Instabilities DeAnza I

Time	Name	Paper # & Title
10:50 AM	James Bailey	WO13.1 Hot dense capsule implosions produced by z-pinch dynamic hohlraum radiation
11:10 AM	Patrick McKenty	WO13.2 Direct-Drive Cryogenic Target Implosion Performance on OMEGA
11:30 AM	Johan Frenje	WO13.3 Measuring Implosion Dynamics Using a Novel Proton Temporal Diagnostic on OMEGA
11:50 AM	Chikang Li	WO13.4 rhoR Asymmetry in the Spherical Implosions of Inertial Confinement Fusion
12:10 PM	Yonatan Elbaz	WO13.5 Long & short wavelength effects on neutron production in direct drive implosion experiments

Parallel Session – WO14

DeAnza II

High Power Laser & Ignition Facilities - II

Time	Name	Paper # & Title
10:50 AM	Chiyoe Yamanaka	WO14.1 High Power Laser Applications in Osaka
11:10 AM	Bruno Le Garrec	WO14.2 LIL facility start-up : first high power & high energy experimental results at 1053 nm & 351 nm
11:30 AM	Andy Bayramian	WO14.3 Activation of the Mercury Laser Testbed for DPSSL IFE driver Technology
11:50 AM	Toshiyuki Kawashima	WO14.4 HALNA-100 DPSSL driver project for inertial fusion energy
12:10 PM	Terrance Kessler	WO14.5 The Coherent Addition of Gratings for Pulse Compression in High-Energy Laser Systems

Parallel Session – WO15

DeAnza III

Equation of State & Condensed Matter Physics - II

Time	Name	Paper # & Title
10:50 AM	Peter Celliers	WO15.1 NIF as a platform for high pressure shock wave equation of state research
11:10 AM	Naeem Tahir	WO15.2 Applications of Intense Heavy Ion Beams to Studies of Thermophysical Properties of High-Energy-Density Matter
11:30 AM	Juergen Meyer-ter-Vehn	WO15.3 IFSA physics studied with XFELs
11:50 AM	Bruce Remington	WO15.4 Materials science at the extremes of pressure & strain rate
12:10 PM	Marina Bastea	WO15.5 Pressure Driven Polymorphic Phase Transitions & Refreeze in Bismuth

Parallel Session – WO16

Fast Ignition and High Intensity Laser Plasma Interactions - III — DeAnza I

Time	Name	Paper # & Title
1:50 PM	Max Tabak	WO16.1 Focusing hot electrons for Fast Ignition applications
2:10 PM	Erik Lefebvre	WO16.2 Forced laser wakefield acceleration: production of a low-emittance electron beam up to 200 MeV with a table-top laser
2:30 PM	David Neely	WO16.3 Radiological Characterisation of Petawatt Laser Interactions
2:50 PM	Gerard Malka	WO16.4 Relativistic electron generation in interactions of a 30 TW laser pulse with a thin foil target & gas jet
3:10 PM	Yasuhiko Sentoku	WO16.5 Laser Acceleration of Deuterons From the Front & the Rear Surfaces of Thin Foils

Parallel Session – WO17

Hot Dense Plasma Atomic Processes — DeAnza II

Time	Name	Paper # & Title
1:50 PM	Serena Bastiani-Ceccotti	WO17.1 Absorption of LTE aluminium & nickel at different densities
2:10 PM	Vladimir Fortov	WO17.2 Pressure Ionization & Dielectriztion of Hot Dense Plasmas Under Intense Shock Waves at Megabars
2:30 PM	Ronnie Shepherd	WO17.3 Hot electron production & dielectronic satellite formation in solid targets heated at relativistic laser intensities
2:50 PM	Takako Kato	WO17.4 X ray satellite spectra of H-like Mg ions
3:10 PM	Emilio Minguez	WO17.5 A comparative study of photoionization cross sections by using several atomic models.

Parallel Session – WO18 ICF/Plasma Diagnostics		DeAnza III
Time	**Name**	**Paper # & Title**
1:50 PM	Jeffrey Koch	WO18.1 Multispectral X-ray Imaging of Omega Implosions for Te & Ne Profile Determination
2:10 PM	James Dunn	WO18.2 Picosecond X-ray Laser Interferometry: A Tool for Probing Dense Laser-Produced Plasmas
2:30 PM	Gianluca Gregori	WO18.3 Direct observation of a non local heat wave
2:50 PM	Jean-Pierre Le Breton	WO18.4 LIL Target Diagnostics
3:10 PM	Perry Bell	WO18.5 Target Diagnostic Technology Research & Development for the LLNL ICF & HED Programs

Parallel Session – WO19 Implosion Hydrodynamics		DeAnza I
Time	**Name**	**Paper # & Title**
3:50 PM	Hiroshi Azechi	WO19.1 Two-dimensional ablation density measurement relevant to Rayleigh-Taylor instability with Fresnel Phase Zone Plate
4:10 PM	Harry Robey	WO19.2 Hydrodynamic Experiments on NIF
4:30 PM	Nick Lanier	WO19.3 Richtmyer-Meshkov mixing in directly-driven cylindrically convergent systems.
4:50 PM	Aaron Miles	WO19.4 The role of compressibility in the evolution of hydrodynamically unstable interfaces
5:10 PM	Richard Olson	WO19.5 Preheat Effects on Shock Propagation in Indirect-Drive Inertial Confinement Fusion Ablator Materials

Parallel Session – WO20 DeAnza II
Laser and Beam Plasma Interactions - III

Time	Name	Paper # & Title
3:50 PM	Erik Lefebvre	WO20.1 Suprathermal electron generation in a coronal plasma & associated preheating of DD fusion targets
4:10 PM	Edward Williams	WO20.2 Crossed beam energy transfer in the NIF ICF target design.
4:30 PM	Robert Kirkwood	WO20.3 Study of the Affect of Ion Acoustic Wave Damping on Energy Transfer Between Crossing Laser Beams in a Plasma with a Mach 1 Flow
4:50 PM	Heidi-Christina Bandulet	WO20.4 Observation of ion acoustic waves using a Thomson scattering diagnostic in correlation with measurements of plasma-induced incoherence of a laser beam
5:10 PM	Kazuhito Yasuike	WO20.5 Ion charge neutralization from laser irradiated solid target ion source

Parallel Session – WO21 DeAnza III
Target Fabrication

Time	Name	Paper # & Title
3:50 PM	David Harding	WO21.1 Formation of Deuterium-Ice Layers in OMEGA Targets
4:10 PM	Drew Geller	WO21.2 The effect of an outer foam layer on the surface roughness of beta-layered solid DT
4:30 PM	Richard Stephens	WO21.3 Direct Drive Reentrant Cone Targets for Fast Ignition
4:50 PM	Daniel Goodin	WO21.4 Cost-Effective Target Fabrication for Inertial Fusion Energy
5:10 PM	Elena Koresheva	WO21.5 FST technologies application for pre-shot target handling

At a Glance

THURSDAY — September 11		
Time	**Event**	**Location**
7:30 AM - 10:00 AM	Foreign Nationals are badged by LLNL security representatives. (Begins Sunday, Sep. 7)	Exhibit Foyer
⌬ 8:30 AM	**Facility Focus Session – ThF1**	DeAnza Ballroom
⌬ 9:40 AM	**NIF Focus Session – ThF2**	DeAnza Ballroom
⌬ 11:15AM	**Start Boarding the Tour Buses for LLNL and LBL Tours**	Front of Hotel
5:51 PM - 8:00 PM	Return From Tours: Return times to Monterey are variable (Depends on completion of tours and traffic)	
6:00 PM	SAB Meeting for Members	Bonzai I
⌬ See Following Tables For More Details		

⌬ Facility Focus Sessions – ThF1	DeAnza Ballroom	
Time	**Name**	**Title**
8:30 AM	Noriak Miyanaga	ThF1.1 FIREX Petawatt Laser Development for Fast Ignition Research at ILE, Osaka
8:50 AM	Colin Danson	ThF1.2 The Vulcan Petawatt Interaction Facility
9:10 AM	John Sethian	ThF1.3 Development of KrF Lasers for Fusion Energy
9:20 AM	Claude Cavaillier	ThF1.4 Status of the LIL/LMJ Project

⌬ Facility Focus Sessions – ThF2	DeAnza Ballroom	
Time	**Name**	**Title**
9:40 AM	George Miller	ThF2.1 National Ignition Facility
10:30 AM	Edward Moses	ThF2.2 National Ignition Facility

Bus 1: LBNL and LLNL

Time	Event
11:30 AM	Leave Monterey
2:00 PM - 3:00 PM	LBNL Tour
4:00 PM - 5:30 PM	LLNL NIF Tour
7:30 PM	Arrive Monterey

NOTE:
- Foreign National badging process begins Sunday, Sep. 7
- Box lunches available for purchase for the bus ride
- Refreshments will be available at both tour sites
- Return times to Monterey are variable (Depends on completion of tours and traffic)

Bus 2: LLNL (SAB members should take this bus)

Time	Event
11:40 AM	Leave Monterey
1:45 PM - 3:15 PM	LLNL NIF Tour
5:15 PM	Arrive Monterey

NOTE:
- Foreign National badging process begins Sunday, Sep. 7
- Box lunches available for purchase for the bus ride
- Refreshments will be available at both tour sites
- Return times to Monterey are variable (Depends on completion of tours and traffic)

Bus 3: LLNL and LBNL

Time	Event
12:00 PM	Leave Monterey
2:00 PM - 3:30 PM	LLNL NIF Tour
4:30 PM - 5:30 PM	LBNL Tour
8:00 PM	Arrive Monterey

NOTE:
- Foreign National badging process begins Sunday, Sep. 7
- Box lunches available for purchase for the bus ride
- Refreshments will be available at both tour sites
- Return times to Monterey are variable (Depends on completion of tours and traffic)

Bus 4: LLNL

Time	Event
12:15 PM	Leave Monterey
2:15 PM - 3:45 PM	LLNL NIF Tour
5:45 PM	Arrive Monterey

NOTE:
- Foreign National badging process begins Sunday, Sep. 7
- Box lunches available for purchase for the bus ride
- Refreshments will be available at both tour sites
- Return times to Monterey are variable (Depends on completion of tours and traffic)

At a Glance

FRIDAY — September 12		
Time	**Event**	**Location**
7 AM - 6 PM	Registration Open	Exhibit Foyer
⌬ 8:30 AM	**Plenary - FP4**	DeAnza Ballroom
10:30 AM	20 min Break	
⌬ 10:50 AM	**Parallel Sessions - FO22, FO23, FO24**	DeAnza I, II, III
10:50 AM - 12:10 PM	Poster Session – FPo5 Topics: EOS and Condensed Matter Physics; Ignition and High Gain Pellet Design; Implosion Hydrodynamics and Hydro-instabilities; Laser and Beam Plasma Interactions; Other Applications	Portola Room
12:30 PM	Lunch Break	
⌬ 1:50 PM	**Edward Teller Lectures – FP5**	DeAnza Ballroom
2:00 PM - 4:10 PM	Poster Sessions – FPo6 Topics: Post Deadline Papers	Portola Room
⌬ 2:50 PM	**Closing Session – FP6**	DeAnza Ballroom
3:10 PM	20 min Break	
⌬ 3:30 PM	**Parallel Sessions - FO25, FO26**	DeAnza I, II, III
⌬ See Following Tables For More Details		

⌬ **Plenary – FP4**	DeAnza Ballroom	
Time	**Name**	**Paper # & Title**
8:30 AM	Jie Zhang	FP4.1 Generation and propagation of hot electrons
9:00 AM	Henry Hutchison	FP4.2 Applications of Short Pulse Lasers
9:30 AM	Alexander Pukhov	FP4.3 Theoretical perspectives on the laser-plasma sources of energetic particles.
10:00 AM	Robert Peterson	FP4.4 IFE Reactors

⌬ **Parallel Session – FO22** **Fast Ignition and High Intensity Laser Plasma Interactions - IV**	DeAnza I	
Time	**Name**	**Paper # & Title**
10:50 AM	Roger Vesey	FO22.1 Pulsed power driven capsule implosions for fast ignition: z-pinch vacuum hohlraums
11:10 AM	Yoneyoshi Kitagawa	FO22.2 Petawatt laser direct heating of imploded plasmas and thermal neutron enhancement

11:30 AM	Heinrich Hora	FO22.3 Petawatt-Picosecond Laser Pulse Generation of Nonlinear Force Driven Blocks from Skin Layer Interaction for fast Ignitor
11:50 AM	H. Ruhl	FO22.4 The Physics of the Generation of Images of Surface Structures by Laser-Accelerated Proton
12:10 PM	Malte Kaluza	FO22.5 Investigation of Relativistic Electron Transport Through Dense Matter Using Rear-side Accelerated Ions

Parallel Session – FO23 DeAnza II
Z-Pinches and Pulsed Power

Time	Name	Paper # & Title
10:50 AM	Cancelled	FO23.1 To Be Announced
11:10 AM	Georgy Oleinik	FO23.2 X- pinch For Quantitative Radiographic Analysis os Mass Distribution in Current Driven Wire Array Implosion on Angara-5-1

11:30 AM	Bryan Oliver	FO23.3 Dynamics of Precursor Plasmas in Z Wire Arrays
11:50 AM	Christopher Garasi	FO23.4 ALEGRA-HEDP Three-dimensional Simulations of Z-Pinch Related Physics
12:10 PM	Sergey Lebedev	FO23.5 Wire Array Z-pinch Experiments at Imperial College

Parallel Session – FO24 DeAnza III
Radiation Hydrodynamics

Time	Name	Paper # & Title
10:50 AM	Ogden Jones	FO24.1 Optimization of NIF ignition targets with varying capsule absorbed energy and hohlraum case-to-capsule ratio
11:10 AM	Nikolay Zhidkov	FO24.2 Investigations of X-Ray Interaction with Matter on ICF problem at “Iskra 5” Laser

11:30 AM	Daniele Babonneau	FO24.3 Influence of two-electron processes on X-ray conversion from gold spheres at OMEGA
11:50 AM	Mark Taylor	FO24.4 Transition to turbulence in plasma jet experiments

Edward Teller Lectures – FP5 DeAnza Ballroom

Time	Name	Paper # & Title
1:50 PM	Larry Suter	FP5.1 Prospects for high-gain, high yield NIF targets driven by 2ω light
2:10 PM	Hideaki Takabe	FP5.2 Hydrodynamic Instability, Integrated Code, Laboratory Astrophysics, and Astrophysics

Closing Session – FP6 DeAnza Ballroom

Time	Name	Paper # & Title
2:50 PM	Erik Storm	FP6.1 Announcement for IFSA 2005 Dates and Location

Parallel Session – FO25 DeAnza I
Laser Acceleration

Time	Name	Paper # & Title
3:30 PM	Koshichi Nemoto	FO25.1 Influence of laser pulse duration on high energy ion generation
3:50 PM	Karl Krushelnick	FO25.2 Particle acceleration using the Vulcan Petawatt laser
4:10 PM	Manuel Hegelich	FO25.3 Laser Driven MEV-ION Jets: Beam Characteristics and Possible Applications
4:30 PM	Yoneyoshi Kitagawa	FO25.4 Electron acceleration above 100 MeV and trapping in capillary target

Parallel Session – FO26 DeAnza II
Heavy Ion Drivers

Time	Name	Paper # & Title
3:30 PM	Arthur W. Molvic	FO26.1 Initial experiments and theory on electron and gas accumulation in a heavy-ion beam
3:50 PM	Kazuhiko Horioka	FO26.2 A system consideration on heavy-ion-fusion drivers

4:10 PM	William Sharp	FO26.3 Simulation of Chamber Transport for Heavy-Ion-Fusion Drivers
4:30 PM	Alex Friedman	FO26.4 New capabilities for modeling intense beams in Heavy Ion Fusion drivers

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